

Mark d-up V rsion to Show Chang s in th Sp cification

Please amend the specification as follows:

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On page 1, line 3 of the Application as filed, please enter the following section:

CLAIM FOR PRIORITY

10 This application claims priority from PCT International Application Number PCT/US00/14768 (International Publication No. WO00/73905), filed 26 May 2000, which claims priority from U.S. Provisional Application 60/136,637, filed 27 May 1999.

15 On page 30, lines 5-17, please replace the paragraphs with the following paragraphs, as amended:

Figure 13 shows a partial cross-sectional view ~~56~~ of an ultra high frequency spring probe substrate ~~46~~ assembly 56. The substrate 16, e.g. 16a, may be electrically insulative, dielectric, or electrically conductive. For embodiments wherein a spring probe 61 and related electrical conductors 60, 68, 64 on and through the substrate ~~46~~ assembly 56 are required to be impedance matched, one or more conductive reference surfaces 58a,58b,58c,58d and vias 65a,65b,65c may preferably be added, either within or on the substrate 16. The substrate ~~46~~ assembly 56 may also contain alternating ground reference traces 62a,62b, which are connected to reference planes 58a,58b,58c, to effectively provide a shielded coaxial transmission line environment 63. As well, the impedance control surfaces 58a,58b,58c,58d are not limited to the planar surfaces shown in Figure 13.

An insulating layer 66 may be deposited on a portion the probe spring 61, such as on the fixed region of the probe spring 61, up to but not enclosing the tip 24 (FIG. 2), as well as on the trace 60, which connects the spring probe 61 to the via 68. A conductive layer 58d may be deposited on top of the insulating layer 66, to provide a coaxial, controlled low impedance connection. Alternate layers of conductive materials 58 and dielectric materials 66 can preferably be integrated within the substrate ~~46~~ assembly 56, such as for embodiments which require decoupling capacitors in close proximity to a probe spring 61. For a substrate 16 which is a conductive material, such as silicon, a thin oxide layer 57 may preferably be deposited between the substrate 16 and a conductive reference plane 58c,

thereby forming a high capacitance structure 59 between the spring probe 61 and the ground planes 58a and 58b. As well, one or more assembled components 69, such as passive components 69 (e.g. typically capacitors, resistors, and/or inductors), or active component devices 69, may be located or incorporated on either surface 62a,62b of the substrate 16, e.g. 16a.

On page 30, lines 5-17, please replace the paragraph with the following paragraph, as amended:

- 10 While some preferred embodiments of the test electronics modules 92a-92k include flex circuit structures 90, the unique interface structure provided by the flex circuit structure 90 may alternately be achieved by other suitable interface designs. Figure 27 is a perspective view of one alternate embodiment of a test electronics module 92, in which an integrated module base 157 provides a pad matrix 88 of electrical contacts 119 on a pad
- 15 ~~matrix~~ first planar region 158. One or more power control modules 100 are electrically connected to electrical contacts 119 located the pad matrix, through power control module (PCM) traces 149, and to one or more buss bars 98a-98h. The power control modules 100 are also preferably positioned in thermal contact with one or more buss bars 98a-98h. Signal traces 148 are also connected to electrical contacts 119 located the pad matrix 88.
- 20 The signal traces 148 extend from the first planar region 158 across a ~~link and component~~ second planar region 159, and are either connected to test electronics 94, or extend to link 96.